UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,211	01/14/2002	Sudhakar Valluru	2705-705	5753

20575 7590 04/25/2008

MARGER JOHNSON & MCCOLLOM, P.C.
210 SW MORRISON STREET, SUITE 400
PORTLAND, OR 97204

EXAMINER	
LI, GUANG W	

ART UNIT	PAPER NUMBER
2146	

MAIL DATE	DELIVERY MODE
04/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/047,211	VALLURU ET AL.	
	Examiner	Art Unit	
	Guang Li	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/047211 has a total of 49 claims pending in the application; there are 5 independent claims and 44 dependent claims, all of which are ready for examination by the examiner.

2. Claims 1-49 are pending in this application.

Response to Arguments

3. Applicant's arguments with respect to claims 1-49 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-17, 21-24, and 28-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rune (US 2001/0029166 A1) in view of Fairchild et al. (US 6,343,320).

7. Regarding claim 1, Rune teaches a method for fault management in a distributed network management station (finding roles of master or slave in the scatternet "An object of the present invention is to provide a method of more easily finding out the roles, master or slave, of units located in the neighbourhood of a considered unit" see ¶[0037]) comprising:

initiating a first device coupled to a network (first Bluetooth device connect to the Bluetooth network "when a first unit tries to establish contact with other units in a neighbour discovery procedure and connects to another unit in a network forming procedure as described above, the steps being executed primarily for units adapted to communicate according to the Bluetooth specification" see ¶[0129])

determining a status of the first device as a master device as a master device of the network or a slave device of the network by (determining whether the initiating device is master or slave see Fig.7):

broadcasting, from the first device (First BT Unit see Fig.7 Block 800), an information packet over the network (First Bluetooth device send inquiry message to all the devices in the network "The procedure starts in a block 800 where the first unit sends an INQUIRY message or several such messages. Any other unit in the vicinity of the first unit can receive such a message" see ¶[0129]; Fig.7 block 800),

listening, at said the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current state of the corresponding second devices as either master or slave devices of the network (First BT unit waiting for the response back from the other BT devices to determined status of those secondary devices "In the block 808 the second unit sends an INQUIRY RESPONSE message back to the first unit indicating that it is a slave unit in an already formed piconet and then in a block 810 this first INQUIRY RESPONSE message is received by the first unit which detects the state of the sender of the message" see ¶[0129]; Fig.7 blocks 808,810,812,814,816,818), and

resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices (second, third, forth BT devices see Fig.7 blocks 802-806) coupled to the network (determined the status of first device as slave when master devices was detected from the third BT unit "In order for the first unit to be able to connect to the third unit as a slave without using the master-slave switch the procedure continues as follows: In a block 822 the first unit sends a PAGE message to the third unit … Then in the blocks 840 and 844 following the blocks 838 and 842 respectively the first unit becomes connected to the third unit as a slave unit and the third unit becomes connected to the first unit as a master unit" see ¶[0131]; Fig7 Blocks 822-844).

Rune does not explicitly disclose information packet indicating whether the first device had a prior status a master device and a prior status of the corresponding second devices as master devices.

Fairchild teaches information packet indicating whether the first device had a prior status a master device and a prior status of the corresponding second devices as master devices (each device start up will gather the status information and send packet on each network "Each NPD initializes, gathers its status information and sends an initial beacon packet on each subnet to which it is coupled. The beacon packets are preferably confined to the subnet and are not copied to other subnets" see abstract). Fairchild further provides the advantage of a device that supports automatic state consolidation according to the present invention couples to a network subnet or otherwise participates in a network via the network subnet (see abstract).

It would have been obvious to one of ordinary skill in the art, having the teachings of Rune and Fairchild before them at the time the invention was made to modify the a method for fault management in a distributed network station of Rune to include (or to use, etc.) information packet indicating whether the first device had a prior status a master device and a prior status of the corresponding second devices as master devices as taught by Fairchild.

One of ordinary skill in the art would have been motivated to make this modification in order to reduce determination time and enhance communication in view of Fairchild.

6. Regarding claim 2, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Fairchild further teaches the method as recited in claim 1, wherein said first device initiates as a slave device (determined initiates device is master device or slave device "If the NPD 302 can not

serve as master, then the forward/master module 420 remains at block 804 and its operation is effectively completed unless there is a dynamic change in determination of mastership" see col. 25 lines 38-44).

7. Regarding claim 3, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the method as recited in claim 1, wherein said information packet comprises a participating-device internet protocol (IP) of said first device (data traffic between Bluetooth devices based on the Internet Protocol "The original intention in making the specification of Bluetooth was to eliminate cables between telephones, PC-cards (Personal Computer cards), wireless headsets, etc., but today the Bluetooth specification is used for establishing true ad hoc wireless networks intended for both synchronous traffic, e.g. voice, and asynchronous traffic, e.g. data traffic based on the IP (the Internet Protocol)" see ¶[0003]).

8. Regarding claim 4, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the method as recited in claim 3, wherein said information packet also comprises a participating-device message authentication code (MAC) of said first device (Device access code for the first BT unit "Thereafter in a block 824 the third unit receives the PAGE message from the first unit. In a block 826 the third unit responds to the PAGE message by sending its Device Access Code (DAC)" see ¶[0131]).

9. Regarding claim 5, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the

method as recited in claim 1, further comprises determining the first device is the master of the network when no responses were received to the information packet (when first BT unit sends Inquiry message out and Inquiry response received other BT unit, first BT unit will form a single master Bluetooth network with no slaves see Fig. 7).

10. Regarding claim 6, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Fairchild further teaches the method as recited in claim 1, wherein said information packet additionally comprises information regarding a current state of said first device as a slave device of the network (determined initiates device is master device or slave device "If the NPD 302 can not serve as master, then the forward/master module 420 remains at block 804 and its operation is effectively completed unless there is a dynamic change in determination of mastership" see col. 25 lines 38-44), and determining the first device is the master device of the network based, at least in part, on any responses received from the one or more second devices coupled to the network (NPD device will received responses from the management server to determine master of the network "Recall that each NPD 302 may include one or more addresses and thus may belong to one or more different groups. Also, if the NPD 302 is part of multiple groups, each group may be served by one or more different management servers" see col. 15 lines 37-41).

11. Regarding claim 7, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the method as recited in claim 1, further comprises: comparing the prior status of the first device with the prior status of the one or more second devices received in the response

to the information packet when one of the second devices is not currently the master device of the network according to the received responses; determining the first device is the master device of the network or a slave device of the network according to the comparison of the prior status of the first device with the prior status of the one or more second devices (When the inquiry response message received from other BT units with status information, first device will determined whether the device status is master/slave "In the block 808 the second unit sends an INQUIRY RESPONSE message back to the first unit indicating that it is a slave unit in an already formed piconet and then in a block 810 this first INQUIRY RESPONSE message is received by the first unit which detects the state of the sender of the message" see ¶[0129]).

12. Regarding claim 8, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Fairchild further teaches the method as recited in claim 7, wherein the information packet further comprises information regarding a total system- up-time of the first device and the responses indicate information regarding corresponding total system-up-times of the one or more second devices (update timing and interval information for each NPD device "The management information includes the TIME, INTERVAL, NPDID and NPDNAME, among other information as desired" see col. 16 lines 3-7; Fig.5 block 512);

comparing the total system-up-times of the and the one or more second devices when the master device of the network could not be determined from the comparison prior status of the first device with the prior status of the one or more second devices (comparing the time variable from the packet to determined the status of the

corresponding NPD "where the variable LASTSTATECHANGETIME is used to compare with the TIME variable from the packet to determine if there has been a state change, the variable CSTATE is used to determine the status of the corresponding NPD 302, NPDID is the identifier of the sending NPD 302 as previously described" see col. 20 12-44);

determining the first device is the master device of the network or a slave device of the network according to the comparison of the total system-up-times (time variable to determine whether the device can be serve as group master or not "the variable CANSERVEASMASTER is derived from the TYPE variable of the packet to indicate whether the sending NPD 302 is able to serve as the ASC group master" see col.20 lines 41-44).

13. Regarding claim 9, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the method as recited in Claim 1, wherein said distributed network management station integrates plug-and-play capability of each of the plurality of devices into said network (Each Bluetooth device join the network using the inquiry and paging message to discover the network see fig.7).

14. Regarding claim 10, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the method as recited in claim 1, wherein said distributed network management station integrates scalability of each of the plurality of devices into said network (Bluetooth device can be scale around as long within the Bluetooth network range "The connection

point between two piconets consists of a Unite C adapted to communicate according to the Bluetooth specification that is a member of both piconets" see ¶[0006]; Fig.1C).

15. Regarding claim 11, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Fairchild further teaches the method as recited in Claim 1, wherein said distributed network management station integrates self-healing capabilities of each of the plurality of devices into said network (perform certain advisory action when reach threshold level "Another action category is thresholds, which are actions that track situations on the network identified by combinations of data. The user has to configure the situations. The threshold tools allow the user to monitor management data and be notified whenever certain conditions arise" see col.7 lines 41-50).

16. Regarding claim 12, Rune teaches a method for fault management in a distributed network management station (finding roles of master or slave in the scatternet "An object of the present invention is to provide a method of more easily finding out the roles, master or slave, of units located in the neighbourhood of a considered unit" see ¶[0037]) comprising:

initiating a first device coupled to a network (first Bluetooth device connect to the Bluetooth network "when a first unit tries to establish contact with other units in a neighbour discovery procedure and connects to another unit in a network forming procedure as described above, the steps being executed primarily for units adapted to communicate according to the Bluetooth specification" see ¶[0129])

determining a status of the first device as a master device as a master device of the network or a slave device of the network by (determining whether the initiating device is master or slave see Fig.7):

broadcasting, from the first device (First BT Unit see Fig.7 Block 800), an information packet over the network (First Bluetooth device send inquiry message to all the devices in the network "The procedure starts in a block 800 where the first unit sends an INQUIRY message or several such messages. Any other unit in the vicinity of the first unit can receive such a message" see ¶[0129]; Fig.7 block 800),

listening, at said the first device, for one or more responses to the information packet from one or more second devices coupled to the network, the one or more responses indicating a current state of the corresponding second devices as either master or slave devices of the network (First BT unit waiting for the response back from the other BT devices to determined status of those secondary devices "In the block 808 the second unit sends an INQUIRY RESPONSE message back to the first unit indicating that it is a slave unit in an already formed piconet and then in a block 810 this first INQUIRY RESPONSE message is received by the first unit which detects the state of the sender of the message" see ¶[0129]; Fig.7 blocks 808,810,812,814,816,818), and

resolving the status of the first device as the master device or slave device of the network based, at least in part, on any responses received from the one or more second devices (second, third, forth BT devices see Fig.7 blocks 802-806) coupled to the network (determined the status of first device as slave when master devices was detected from the third BT unit "In order for the first unit to be able to connect to the third

unit as a slave without using the master-slave switch the procedure continues as follows: In a block 822 the first unit sends a PAGE message to the third unit … Then in the blocks 840 and 844 following the blocks 838 and 842 respectively the first unit becomes connected to the third unit as a slave unit and the third unit becomes connected to the first unit as a master unit" see ¶[0131]; Fig7 Blocks 822-844).

Rune does not explicitly disclose information packet indicating whether the first device had a prior status a master device, a prior status of the corresponding second devices as master devices, and initialing a fail-over process, wherein said fail-over process results in said secondary device re-evaluation of said master device.

Fairchild teaches information packet indicating whether the first device had a prior status a master device, a prior status of the corresponding second devices as master devices (each device start up will gather the status information and send packet on each network "Each NPD initializes, gathers its status information and sends an initial beacon packet on each subnet to which it is coupled. The beacon packets are preferably confined to the subnet and are not copied to other subnets" see abstract). Fairchild further provides the advantage of a device that supports automatic state consolidation according to the present invention couples to a network subnet or otherwise participates in a network via the network subnet (see abstract) and initialing a fail-over process, wherein said fail-over process results in said secondary device re-evaluation of said master device (master check function to determined if the NPD is master of a given group "From block 808, operation proceeds to block 810 to perform a MASTERCHECK function to determine if the NPD

302 actually is the master of a given group" see col. 26 lines 31-39; Fig.8 blocks 808-812).

It would have been obvious to one of ordinary skill in the art, having the teachings of Rune and Fairchild before them at the time the invention was made to modify the a method for fault management in a distributed network station of Rune to include (or to use, etc.) information packet indicating whether the first device had a prior status a master device, a prior status of the corresponding second devices as master devices and initialing a fail-over process, wherein said fail-over process results in said secondary device re-evaluation of said master device as taught by Fairchild.

One of ordinary skill in the art would have been motivated to make this modification in order to enhance communication and fault management purpose in view of Fairchild.

17. Regarding claim 13, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune and Fairchild further teach the method as recited in claim 12, wherein said information packet broadcast by said first device further comprises:

transmitting a participating-device Internet protocol (IP) of said first device (data traffic between Bluetooth devices based on the Internet Protocol "The original intention in making the specification of Bluetooth was to eliminate cables between telephones, PC-cards (Personal Computer cards), wireless headsets, etc., but today the Bluetooth specification is used for establishing true ad hoc wireless networks intended for both synchronous traffic, e.g. voice, and asynchronous traffic, e.g. data traffic based on the

IP (the Internet Protocol)" see Rune ¶[0003]); transmitting a participating-device message authentication code (MAC) of said first device (Device access code for the first BT unit "Thereafter in a block 824 the third unit receives the PAGE message from the first unit. In a block 826 the third unit responds to the PAGE message by sending its Device Access Code (DAC)" see Rune ¶[0131]);

transmitting information regarding the previous state of said first device; transmitting information regarding the current state of said first device; and transmitting information regarding the total system-up-time of said first device (update timing and interval information for each NPD device "The management information includes the TIME, INTERVAL, NPDID and NPDNAME, among other information as desired" see Fairchild col. 16 lines 3-7; Fig.5 block 512).

18. Regarding claim 14, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Fairchild further teaches the method as recited in claim 12,

wherein the information packet further comprises information regarding a total system- up-time of the first device and the responses indicate information regarding corresponding total system-up-times of the one or more second devices (update timing and interval information for each NPD device "The management information includes the TIME, INTERVAL, NPDID and NPDNAME, among other information as desired" see col. 16 lines 3-7; Fig.5 block 512);

comparing the total system-up-times of the and the one or more second devices(comparing the time variable from the packet to determined the status of the

corresponding NPD "where the variable LASTSTATECHANGETIME is used to compare with the TIME variable from the packet to determine if there has been a state change, the variable CSTATE is used to determine the status of the corresponding NPD 302, NPDID is the identifier of the sending NPD 302 as previously described" see col. 20 12-44);

determining the first device is the master device of the network or a slave device of the network according to the comparison of the total system-up-times (time variable to determine whether the device can be serve as group master or not "the variable CANSERVEASMASTER is derived from the TYPE variable of the packet to indicate whether the sending NPD 302 is able to serve as the ASC group master" see col.20 lines 41-44).

19. Regarding claims 15-17, they are rejected for the same reason as claims 9-11 as set forth hereinabove.

20. Regarding claims 21-22, they are rejected for the same reasons as claims 12-13 as set forth hereinabove. Regarding claims 12-13, Rune together with Fairchild taught the claimed method, therefore together, they teach the claimed system.

21. Regarding claim 23, Rune together with Fairchild taught the fault management in a distributed network management station as described above. Rune further teaches the computer system of claim 21, wherein said status between said first device and said plurality of devices is resolved by said first device evaluating each said information packet from said first device and any of said plurality of devices (evaluating the status of the first device by inquiry and page message see Fig.7 blocks 800 and 822).

22. Regarding claim 24, they are rejected for the same reasons as claim 9 as set forth hereinabove.

23. Regarding claims 28-38, they are rejected for the same reasons as claims 1-11 as set forth hereinabove. Regarding claims 1-11, Rune together with Fairchild taught the claimed method, therefore together, they teach the claimed computer usable storage medium.

24. Regarding claims 39-49, they are rejected for the same reasons as claims 1-11 as set forth hereinabove. Regarding claims 1-11, Rune together with Fairchild taught the claimed method, therefore together, they teach the claimed mechanism.

25. **Claims 18-20 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rune (US 2001/0029166 A1) in view of Fairchild et al. (US 6,343,320) and in further in view of Johansson et al. (US 2002/0044549 A1).**

26. Regarding claim 18, Rune together with Fairchild taught a method for fault management in a distributed network management station in claim 12 as described hereinabove. Initiating a first device coupled to a network, determining a status of the first device as master device of the network or a slave device of the network by: broadcasting an information packet over the network that indicating whether the first device had a prior status as master device, listening for response and resolving the status of the first devices as the master device or slave device of the network based.

Rune together with Fairchild does not explicitly disclose wherein said secondary devices reevaluation occurs due to a loss of communication with said master device.

Johansson further teaches wherein said secondary devices re-evaluation occurs due to a loss of communication with said master device (master and slave detection flowchart Fig. 9A-9C and Page master node with next highest number of slave nodes see Fig. 9 and Fig 10).

It would have been obvious to one of ordinary skill in the art, having the teachings of Rune through Johansson before them at the time the invention was made to modify the a method for fault management in a distributed network station of Rune to include (or to use, etc.) wherein said secondary devices reevaluation occurs due to a loss of communication with said master device as master devices as taught by Johansson.

One of ordinary skill in the art would have been motivated to make this modification in order to provide fault tolerant and backup purpose in view of Johansson.

27. Regarding claim 19, Rune through Johansson taught the fault management in a distributed network management station according to claim 18 as described above. Johansson further teaches wherein said secondary devices re-evaluation comprises questioning said master device for state or status (The fact that the responding node's status as idle, master or slave is indicated in the INQUIRY RESPONSE message allows the inquiring node to correctly interpret the contents of the AM_ADDR as either number of slave nodes in the responding node's piconet or the number of nodes that the responding nodes can reach see ¶[0071]).

28. Regarding claim 20, Rune through Johansson taught fault management in a distribution network as recited in claim 19, as described above. Johansson further

teaches wherein said state or status of said master device comprise at least one of said master device in a paused state (The fact that the responding node's status as idle, master or slave is indicated in the INQUIRY RESPONSE message allows the inquiring node to correctly interpret the contents of the AM_ADDR as either number of slave nodes in the responding node's piconet or the number of nodes that the responding nodes can reach see ¶[0071]), said master device in a crashed state, transmission control protocol (TCP) disconnect from said master device, and overall loss of master device (The MCS is maintained autonomously as new nodes arrive to the scatternet and other nodes leave the scatternet see ¶[0024]).

29. Regarding claims 25-27, they are rejected for the same reasons as claims 18-20 as set forth hereinabove.

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 25, 2008
GL
Patent Examiner

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit

2152